United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

·				
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,003	07/16/2003	Wilhelmus Hendrikus Alfonsus Bruls	NL030905	9123
24737 7590 10/01/2007 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001			EXAMINER	
			ANYIKIRE, CHIKAODILI E	
BRIARCLIFF	MANOR, NY 10510		ART UNIT PAPER NUMBER	
			2621	
			•	
			MAIL DATE	DELIVERY MODE
	•		10/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/621,003	BRULS ET AL.				
Office Action Summary	Examiner	Art Unit				
	Chikaodili E. Anyikire	2621				
The MAILING DATE of this communication app Period for Reply	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 10 Au	igust 2007.					
· · · ·	This action is FINAL . 2b) This action is non-final.					
	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) ☐ Claim(s) 1-21 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-21 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 16 July 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s)	. د ا					
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te				

Application/Control Number: 10/621,003 Page 2

Art Unit: 2621

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed August 10, 2007 have been fully considered but they are not persuasive. Claims 1-21 are currently pending.

- 2. Claims 1-21 are rejected under 35 U.S.C 102(e) as being anticipated by Kato et al.
- 3. The applicant argues that the prior art does not teach, "determining if the segment can be reconstructed from at least another video picture based on motion-compensated interpolation applied to the other video picture". The examiner respectfully disagrees. The applicant admits that the prior art uses motion estimation (ME) residue to calculate the degree of coding difficulty, which is well known in the art to relate to motion-compensation. If the picture is too difficult then the prior art discloses that the block is skipped, which means that the segment cannot be reconstructed.
- 4. The applicant argues that the prior art does not teach, "reconstructing the segment from at least another video picture based on motion-compensated interpolation applied to the other video picture". The examiner respectfully disagrees. The applicant admits that the prior art uses motion estimation (ME) residue to calculate the degree of coding difficulty, which is well known in the art to relate to motion-compensation(Kato, Fig 9, 52). If the picture is too difficult then the prior art discloses that the block is skipped, which means that the segment cannot be reconstructed, but if not then the coding process is continued and reconstruction occurs.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 6. Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Kato et al (US 6,535,556).

As per claims 1, 5, 18, and 19, Kato et al discloses a method and electronic device of encoding a video picture, the method comprising:

for a segment of the video picture determining if the segment can be reconstructed from at least another video picture based on motion-compensated interpolation (Fig 9, 52; Fig 10, Step SP21) applied to the other video picture (Fig 10, Col 15 Ln 6-40 and Col 17 Ln 34-48; the prior art discloses a coding difficulty between I-picture and B-pictures);

if the segment cannot be reconstructed, encoding the segment (Fig 10, Steps SP23 and SP24, Col 17 Ln 49-64); and

otherwise skipping the segment (Fig 10, Step SP25; Col 17 Ln 65- Col 18 Ln 10).

As per claims 9, 13, and 17, Kato et al discloses a method of decoding an encoded video picture (Fig 9, 49 and 50), the method comprising:

determining if a segment of the picture is missing (Col 15 Ln 6-40); and

Application/Control Number: 10/621,003

Art Unit: 2621

if the segment is missing, reconstructing the segment from motion-compensated interpolation (Fig 9, 52) applied to at least another video picture (Col 15 Ln 6-40; the prior art discloses setting a skip flag to keep track of whether the codec should skip a segment).

As per claims 2, 6, 10, and 14, Kato et al discloses the method of claim 1, 5, 9, and 13 wherein the segment comprises a macroblock (Col 4 Ln 22-35).

As per claim 3, 7, 11, and 15, Kato et al discloses the method of claim 1, 5, 9, and 13 wherein the encoding comprises using a coding scheme compliant with one of ISO and ITU video compression standards (Col 1 Ln 18-51 and Col 2 Ln 23-28).

As per claim 4, 8, 20, and 21, Kato et al discloses the method of claim 3 and 7 wherein the coding scheme complies with MPEG-2 and wherein the determining comprises:

decoding an encoded B-picture (Fig 9, 49 and 50; Col 13 Ln 66 - Col 14 Ln 40); generating a further picture using motion-compensated interpolation applied to the other video picture (Fig 9, 52; Col 14 Ln 29-40);

determining a difference per macroblock between the decoded B-picture and the further picture (Fig 9, 30); and

evaluating the difference under control of a consistency measure of motion vectors associated with the further picture (Fig 9, 30 and 52; Col 14 Ln 29-55).

Application/Control Number: 10/621,003

Art Unit: 2621

As per claims 12 and 16, Kato et al discloses the method of claim 10 and 14, wherein:

decoding the picture comprises using an MPEG-2 skipped-macroblock condition (Col 1 18-21 and Col 2 Ln 23-28, and Col 15 Ln 6-40); and

writing data, generated by the motion-compensated interpolation to reconstruct the macroblock, over further data generated under the skipped-macroblock condition (Col 14 Ln 29-55).

As per claim 19, Kato et al discloses electronic video content information encoded such that at decoding at least one segment of at least one picture is to be reconstructed using motion-compensated interpolation (Fig 9, 52) performed on at least one other picture (Col 14 Ln 29-40).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2621

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chikaodili E. Anyikire whose telephone number is (571) 270-1445. The examiner can normally be reached on Monday to Friday, 7:30 am to 5 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272 - 7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CEA

PRIMARY EXAMINER